Motivated Beliefs, Attention, and Insurance[1]

The poor in the developing world are extremely vulnerable to risk from a variety of sources including the high correlation of poverty and ill health (Case et al., 2002), the riskiness of agricultural occupations (Dercon, 2004; Cole, et al. 2009) and the broad insecurities that arise from weak legal protections (e.g., Field, 2007). Micro-insurance although a relatively new concept has been gaining importance as tool to manage such risk. Attracting customers to take up micro-insurance is a challenge faced by many providers. We plan to conduct an experiment to test how different marketing treatments of a rainfall insurance product in India might affect take up decisions and propose a descriptive model incorporating loss aversion and motivated beliefs to explain these decisions.

We incorporate two innovations in our model of a sequential decision to listen to positive and negative marketing messages. First, farmers may have motivated beliefs: specifically, they may prefer to retain belief in a rosy future, even if that belief distorts their behavior so as to compromise their future fortunes.[2] This affects both the attractiveness of insurance and the attractiveness of attending to positive and negative marketing messages. Second, decision makers are motivated by both losses and gains but tend to give a greater decision weight to potential losses i.e. farmers may be loss averse[3]. We plan to test subject behavior using a 2 (positive versus negative frame) by 2 (flyer versus video treatment) between subjects experimental design at the Center for Microfinance experimental lab in Ahmadabad, India. Subjects will be randomly assigned to one of four treatments and will be asked to answer a series of factual questions about substantive and non-substantive content in the ads. Recall

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[2] Brunnermeier and Parker (2008) present a theory in which people are overoptimistic in making predictions and believe in a rosy future because they might receive ex-ante utility benefits from anticipating less work and this might outweigh the ex-post costs of poor planning. We can extend such a model to our setting where farmers receive ex-ante utility benefits from distorting beliefs about the future – or alternatively by receiving disutility from contemplating negative outcomes.

[3] Tversky and Kahneman (1981)

questions based on ad content will test subjects' attention to the marketing treatments while questions on attitudes towards the product will test for persuasiveness of the framing manipulations.

Our hypothesis was generated by a curious finding in the data for one of the experimental marketing treatments of Cole S. et al.[4] where the authors study the adoption of an innovative rainfall insurance product in rural India. Alternating between a positive and a negative frame had inconsistent consequences for insurance take-up in 2006 and 2007. Specifically, using "negative language" (such as "mitigation of catastrophe") decreased take-up in 2006 relative to using "positive language" (such as "protection" and "security"). That year these treatments were implemented on paper flyers. In 2007, when treatments were implemented using videos, the effect reversed. We hypothesize that people dislike contemplating negative outcomes and could easily terminate the allocation of attention to a flyer by declining to purchase insurance. Videos however, may have had sufficient entertainment value to overcome aversion to contemplating negative outcomes. It might be the case that negative messages, when attended to, have a more powerful effect in increasing insurance take-up.

The hypotheses that (a) subjects have a dislike towards contemplating negative outcomes and (b) framing effects may have varying consequences based on the level of subject involvement, are both supported by prior research. Cox D., Cox A. (2001)[5], report that people dislike contemplating negative outcomes and as an example might dislike medical diagnostic tests due to their reluctance to find out whether their fears are justified. Maheswaran and Meyers-Levy[6] (1990) suggest that framing effects are moderated by subjects' involvement with the framed message and find that positively framed messages may be more persuasive when there is little emphasis on detailed processing, but negatively framed messages may be more persuasive when detailed processing is emphasized. Based on these hypotheses we expect positive frames to result in higher recall than negative frames, and video treatment to result in higher recall than flyer treatment. Conditional on recall, we expect negative frames to cause higher insurance demand than positive frames.

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[4] Barriers to Household Risk Management: Evidence from India; Cole S., Gine X., Tobacman J., Topalova P., Townsend R., Vickery J.

[5] Communicating the Consequences of Early Detection: The Role of Evidence and Framing; Dena Cox, Anthony Cox

[6] The Influence of Message Framing and Issue Involvement; Maheswaran, D. and Joan Meyers-Levy

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